



## PATENT ABSTRACTS OF JAPAN

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(21) Application number: **07226123**(22) Date of filing: **11.08.1995**(71) Applicant: **MITSUBISHI RAYON CO LTD**(72) Inventor: **TANIZAKI YOSHIE  
OKAZAKI HIROYUKI  
KOBAYASHI YUKIO  
NISHI ATSUKO**(54) **WATER PURIFIER**

## (57) Abstract:

**PROBLEM TO BE SOLVED:** To easily regenerate an anion-exchange resin by disposing the second water purification vessel using activated carbon and hollow fiber membranes as the filter mediums downstream from the first water purification vessel using a chloride ion type strongly basic anion-exchange resin as the filter medium and placing the filter medium of the first water purification vessel so that the medium can freely be loaded and unloaded.

**SOLUTION:** In the first purification vessel 5 of this purifier, a cylindrical inner case 8 provided in its upper section with a resin frame 7 to which a nonwoven fabric is attached and a sintered filter 9, contains an anion-exchange resin 6 and raw water that is supplied from a water supply port 10 placed in the upper section of the vessel 5 is passed through the anion-exchange resin layer and allowed to flow out from a filtrate outflow port 11 also placed in the upper section of the vessel 5. Each of the water supply port 10 and filtrate water outflow port 11 of the first purification vessel 5 has an at-

tachable and detachable coupler type end connection. In the second purification vessel 13, a cylindrical inner case contains hollow fiber membranes 16 in the central section and also, activated carbon 15 in the peripheral section and water that is supplied from a water supply port 14 placed at the bottom of the vessel 13 is passed through the layer of activated carbon 15 from its upside and further, passed through the hollow fiber membranes 16 to allow the water to flow out from the upside of the membranes 16 and to deliver the water from a purified water delivery port 17 as purified water.

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